



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

November 20, 2013

WELL WORK PERMIT

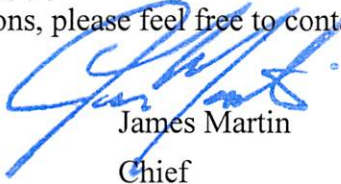
Re-Work

This permit, API Well Number: 47-3906354, issued to RAVEN RIDGE ENERGY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: WHITE #1A
Farm Name: TEX SEABOLT
API Well Number: 47-3906354
Permit Type: Re-Work
Date Issued: 11/20/2013

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
2. Well work activities shall not constitute a hazard to the safety of persons.

39-6354

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: RAVEN RIDGE ENERGY, LLC 494485865 KANAWHA -39 BIG SANDY - 01 BLUE CREEK - 258
Operator ID County District Quadrangle

2) Operator's Well Number: WHITE 1A 3) Elevation: 839'

4) Well Type: (a) Oil X or Gas X
(b) If Gas: Production X / Underground Storage _____
Deep _____ / Shallow X

5) Proposed Target Formation(s): WEIR Proposed Target Depth: 2,100'

6) Proposed Total Depth: 2,400' Feet Formation at Proposed Total Depth: 2,000' - 2,400'

7) Approximate fresh water strata depths: 150'

8) Approximate salt water depths: 1,100' - 1,600'

9) Approximate coal seam depths: NO COAL LISTED ON TITLE

10) Approximate void depths,(coal, Karst, other): NONE

11) Does land contain coal seams tributary to active mine? NO

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

RUN 4 1/2" CASING, STIMULATE AND FRAC (ACID & WATER) AN EXISTING WELL

Amey W. Hula
10-4-13

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor						
Fresh Water	9 5/8"	LS	17LBS	350'	EXISTING	CTS
Coal						
Intermediate	7"	J55	23LBS	1,850'	EXISTING	CTS
Production	4 1/2"	J55	10.5LBS	2200'	2200'	150 Sacks
Tubing						
Liners						

Packers: Kind: _____
Sizes: _____
Depths Set _____

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OCT 15 2013
Office of Oil and Gas
WV Dept. of Environmental Protection

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Office of Oil and Gas

3906354R

CHECK #8316
\$2200.00
4 PERMITS

WW-2A
(Rev. 6-07)

NOV 20 2013

WV Department of
Environmental Protection

1.) Date: OCTOBER 4, 2013
2.) Operator's Well Number WHITE 1A
State 47- County 39 Permit 6354
3.) API Well No.: 47- 39 6354

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name TEX SEABOLT
Address 669 JORDAN CREEK ROAD
ELKVIEW, WV 25071
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector TERRY URBAN
Address PO BOX 1207
CLENDENIN, WV 25045
Telephone (304) 549-5915
5) (a) Coal Operator
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas
Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties by:
 Personal Service (Affidavit attached)
 x Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator RAVEN RIDGE ENERGY, LLC
By: RYAN CUNNINGHAM
Its: OFFICER
Address 3230 PENNSYLVANIA AVENUE
CHARLESTON, WV 25302
Telephone (304) 344-9291

Subscribed and sworn before me this 4th day of OCTOBER, 2013

Danielle N. Bays Notary Public
My Commission Expires 2/10/2015

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

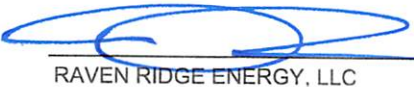
Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
IRENE RUNYON	CUNNINGHAM ENERGY, LLC SEE ATTACHED AGREEMENT	1/8	261/287

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: 
By: Its: RAVEN RIDGE ENERGY, LLC
OFFICER

Received
OCT 15 2013
Office of Oil and Gas
WV Dept. of Environmental Protection

3906354R

AGREEMENT

This agreement is made and entered into this 16th day of February, 2012 by and between Cunningham Energy, LLC, a West Virginia limited liability company and Raven Ridge Energy, LLC, a West Virginia limited liability company.

This agreement gives permission to Raven Ridge Energy to operate any leases (owned property or otherwise leased) maintained by Cunningham Energy, LLC for any and all past, current or future projects to be developed by or for Cunningham Energy, LLC.

CUNNINGHAM ENERGY, LLC

Owner

RAVEN RIDGE ENERGY

Officer

State of West Virginia

County of Kanawha

The foregoing instrument was acknowledged before me this 16th day of February, 2012 by Ryan E. M. Cunningham, Officer of Raven Ridge Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.



Notary Public

2/10/2015
My Commission Expires

State of West Virginia

County of Kanawha

The foregoing instrument was acknowledged before me this 16th day of February, 2012 by Ryan E. M. Cunningham, Owner of Cunningham Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.



Notary Public

2/10/2015
My Commission Expires

Received

OCT 15 2013

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Office of Oil & Gas

MAY 1 2013

3906354R

NOV 20 2013
WV Department of
Environmental Protection

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name RAVEN RIDGE ENERGY, LLC OP Code 494485865

Watershed (HUC 10) TRIBUTARY OF JORDAN CREEK Quadrangle BLUE CREEK

Elevation 839' County KANAWHA District BIG SANDY

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No X

Will a pit be used for drill cuttings? Yes _____ No _____

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes X No _____ If so, what ml.? 30 mil.xx

Proposed Disposal Method For Treated Pit Wastes:

- ☒ Land Application
- _____ Underground Injection (UIC Permit Number _____)
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Explain _____)

Will closed loop system be used? N/A

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. AIR, FRESH WATER

-If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used in drilling medium? SOAP

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. LANDFILL

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) LIME

-Landfill or offsite name/permit number? CHARLESTON LANDFILL

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature _____

Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title OFFICER

Subscribed and sworn before me this 4th day of OCTOBER, 20 13

My commission expires 02/10/2015

Notary Public



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
DANIELLE N. BAYS
Cunningham Energy, LLC
323C Pennsylvania Avenue, Charleston, WV 25302
My Commission Expires February 10, 2015

3906354R

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name RAVEN RIDGE ENERGY, LLC OP Code 494485865

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Company Official Signature [Signature]

Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title OFFICER

Subscribed and sworn before me this 4th day of OCTOBER, 20 13

Notary Public

My commission expires 02/10/2015

Received

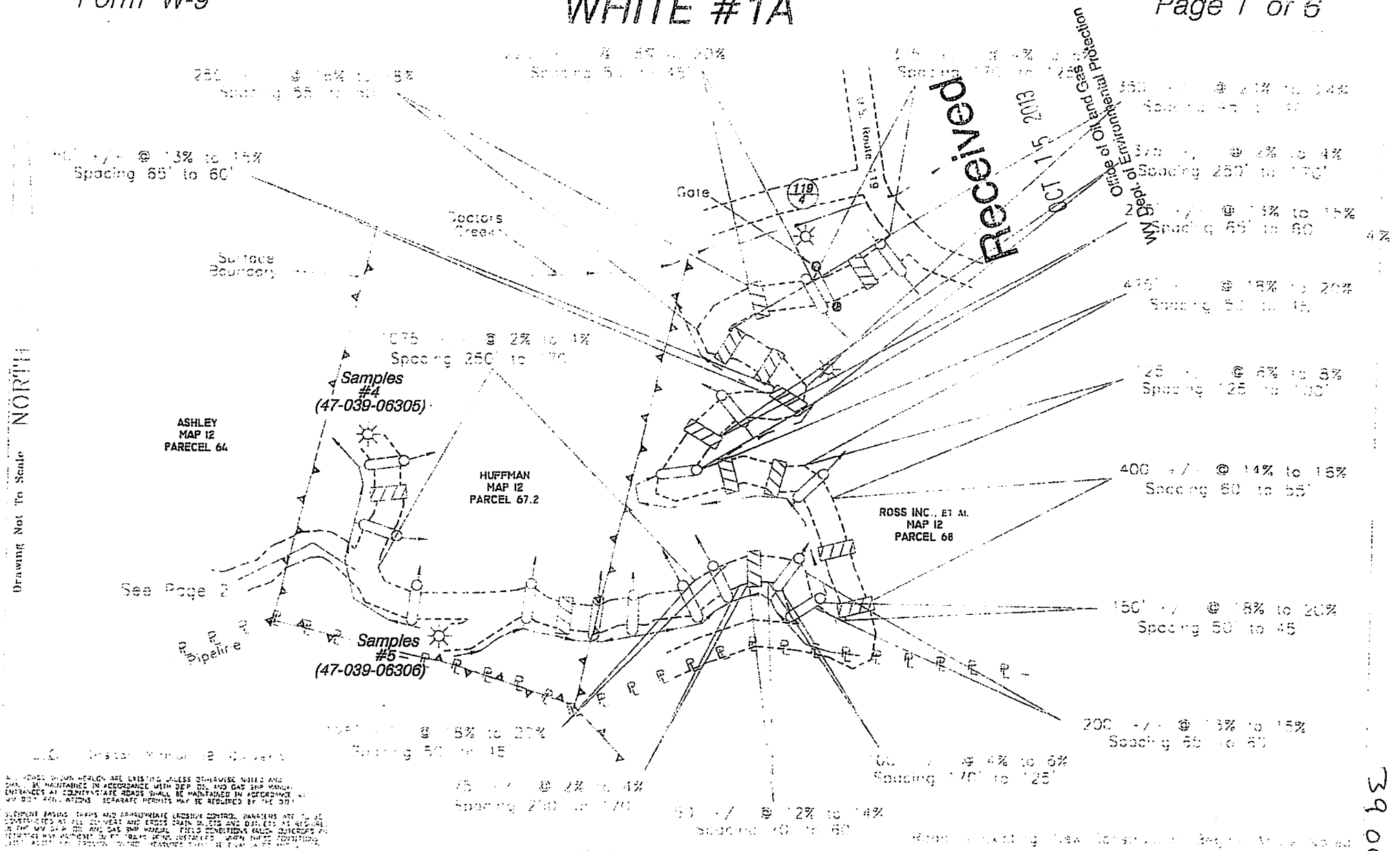
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Office of Oil and Gas
WV Dept. of Environmental Protection

RAVEN RIDGE ENERGY, LLC. WHITE #1A

Form W-9

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ALL EXISTING SURVEYS ARE SHOWN UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP. OIL AND GAS IMP. MINOR. DISTURBANCE AND COUNTRY-STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH DEP. OIL AND GAS IMP. MINOR. SEPARATE PERMITS MAY BE REQUIRED BY THE DEP. SURVEYING, TRAPS AND APPROPRIATE EROSION CONTROL, DRAINAGE ARE TO BE CONSIDERED AT ALL CONVEY AND CROSS DRAIN DRAINAGE AND DIRECTED AS REQUIRED BY THE DEP. OIL AND GAS IMP. MINOR. FIELD CONDITIONS (RAIL, OUTCROPS, ETC.) MAY AFFECT THE FIELD SURVEYING. WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE DEP. OIL AND GAS IMP. MINOR. FIELD CONDITIONS (RAIL, OUTCROPS, ETC.) MAY AFFECT THE FIELD SURVEYING. WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE DEP. OIL AND GAS IMP. MINOR.

HUPP Surveying & Mapping

Drafted By

Date Drafted

Job Number

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Office of Oil & Gas

39 06354R

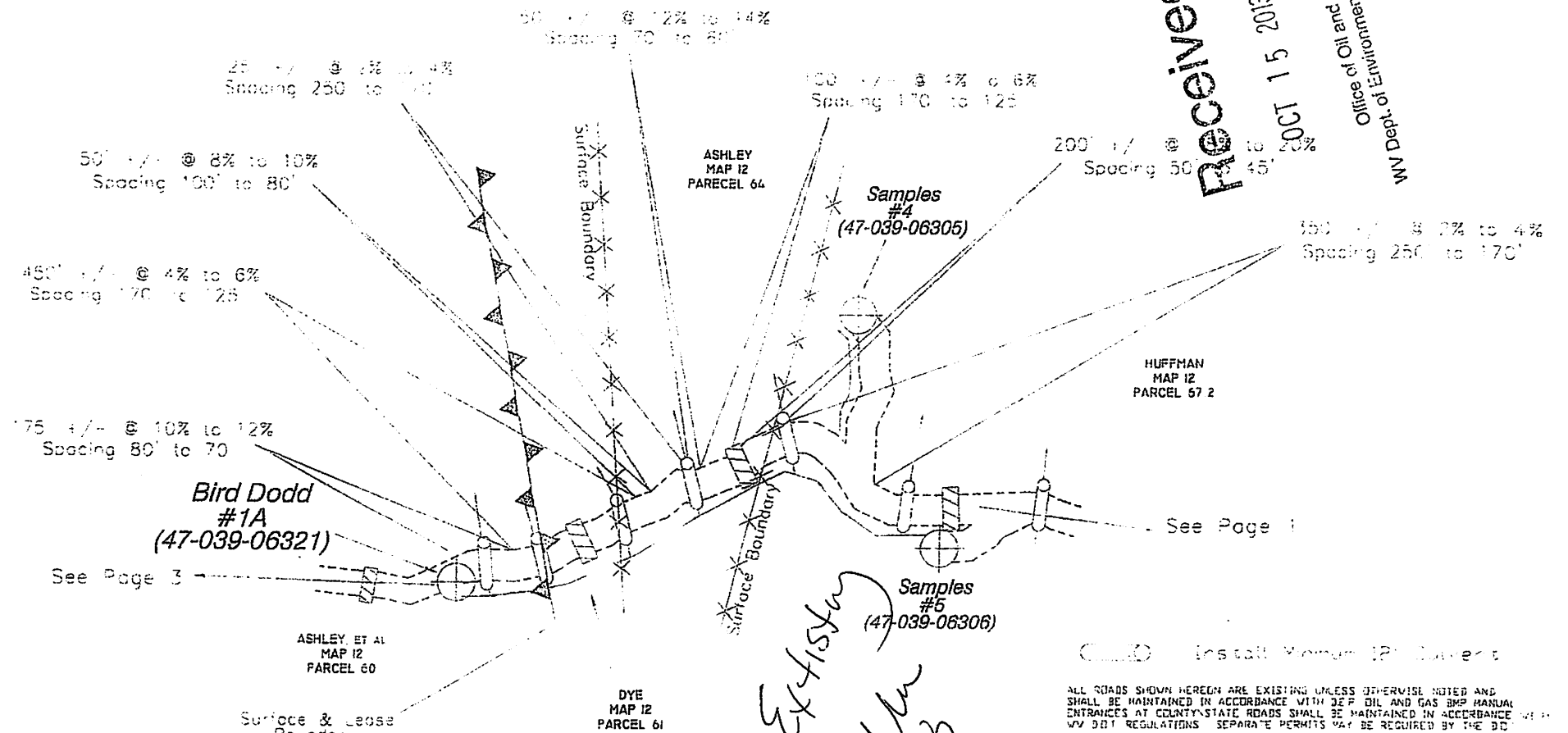
Form W-9

RAVEN RIDGE ENERGY, LLC. WHITE #1A

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Office of Oil and Gas
Environmental Protection
NM Dept. of

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OCT 15 2013



All Existing
D. D. Dye
10-4-13

Install Minimum 12" Culvert

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY-STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH NM DOT REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

SEDIMENT BASINS, TRAPS AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE NM DEP OIL AND GAS BMP MANUAL. FIELD CONDITIONS (CREEK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SHOWN ON THIS PLAN OR NOT.

TEMPORARY SEED AND MULCH SHALL BE APPLIED ON CONSTRUCTION OF LOGS, CUT AND STACK ALL TIMBER ABOVE 5 INCHES IN DIAMETER AND THICKER.

STAKE OUT SHALL BE DONE BY THE CONTRACTOR.

HUPP Surveying & Mapping

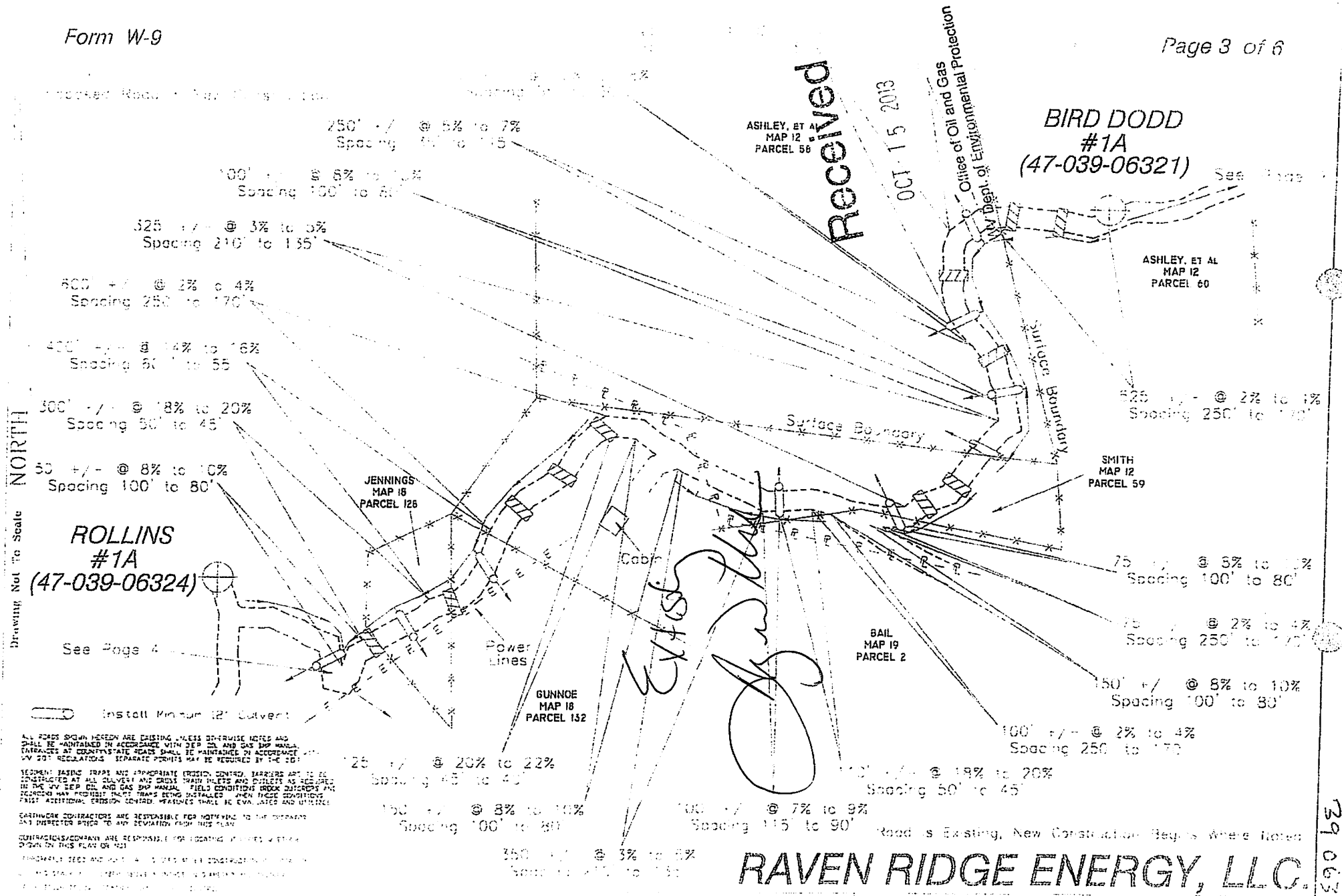
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WHITE #1A

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RAVEN RIDGE ENERGY, LLC.

39 06354R

3906354R

Form W-9

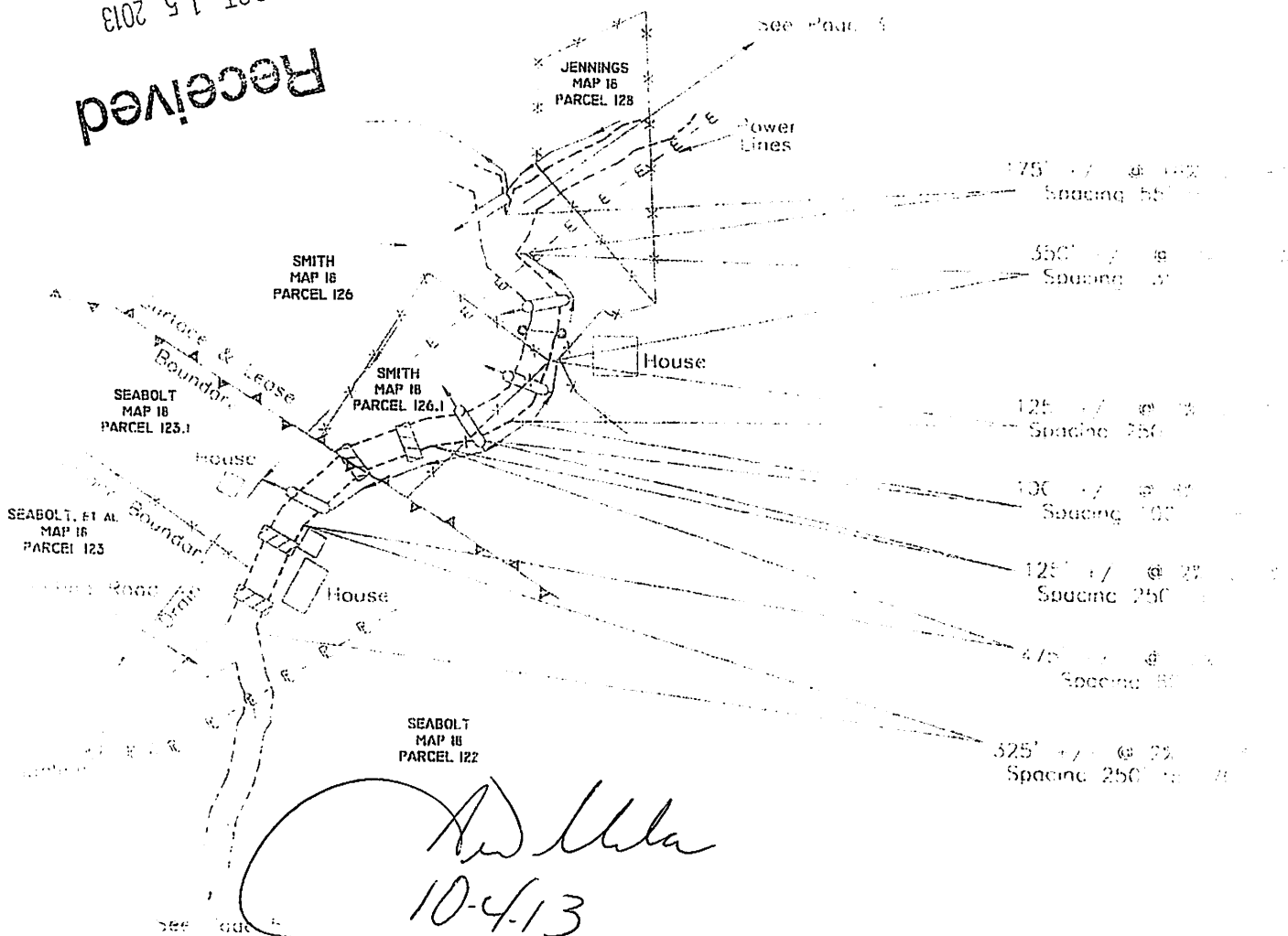
RAVEN RIDGE ENERGY, LLC. WHITE #1A

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Office of Oil and Gas
WV Dept. of Environmental Protection

OCT 15 2013

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Roads Existing. New Construction Begins Where Noted.

INSTALL MINIMUM 12" DRAINAGE
ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED. ALL ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS PERMITS. ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH DEP REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED FOR OTHER ROADS.
SEDIMENT BASINS, TRAPS AND APPROPRIATE EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAIN PLOTS AND OTHER LOCATIONS IN THE WV DEP OIL AND GAS PERMIT. FIELD SUPERVISORS SHALL ENSURE ALL MEASURES ARE INSTALLED AND MAINTAINED. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED WHERE NECESSARY.
LANDWORK CONTRACTORS ARE RESPONSIBLE FOR ADHERING TO ALL PERMITS AND INSPECTOR POINT TO ANY DEVIATION FROM THIS PLAN.
OPERATIONS/COMPANY ARE RESPONSIBLE FOR MAINTAINING ALL MEASURES IN ACCORDANCE WITH THIS PLAN OR DEP.
TEMPORARILY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION.
KEEP AND STAKE ALL TIEPINS ABOVE A DRAINAGE IN DIAPYCNIS OR OTHER PERMANENT MARKERS.
STAKE HOUSES BELOW LOCATION + OR - 5' BY 10' CONTROL.

HUPP Surveying & Mapping

PO BOX 647 GRANTSVILLE, WV 26147
733-667-7035 FAX 733-667-7035 MAIL hupp@frontiernet.net

Drafted BY:

DE

Date Drafted:

08/14/12

Job Number

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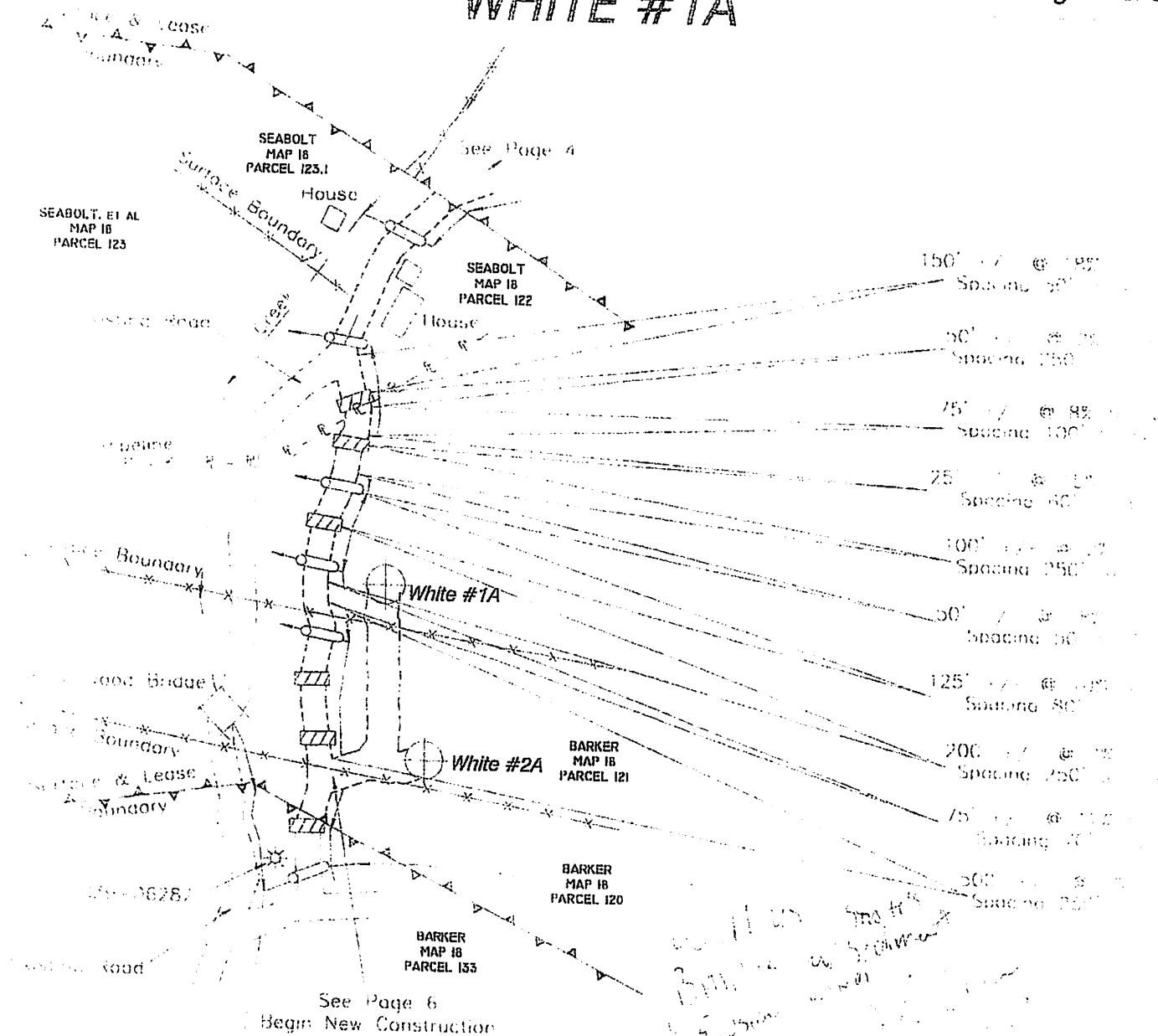
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2013

Form W-9

RAVEN RIDGE ENERGY, LLC.
WHITE #1A

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Install Minimum 12" Culverts:

EXISTING DRIVEWAYS ARE EXISTING. ALL OTHERS OTHERWISE NOTED AND MAINTAINED IN ACCORDANCE WITH D.P.D. AND GAS D.P.D. CONDITIONS. ALL DRIVEWAYS TO BE MAINTAINED IN ACCORDANCE WITH D.P.D. CONDITIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

TRAFFIC AND APPROPRIATE CRASH CENTER, BARRIERS AND TO BE MAINTAINED AND CRASH DATA BEING COLLECTED AND REPORTED TO THE STATE OF TEXAS. FIELD CONDITIONS CRACKS, DISINTEGRATION, AND WEAR SHOULD BE MONITORED. WEAR SURVEY SHALL BE EVALUATED AND UTILIZED.

THE USER OF THIS PLAN IS RESPONSIBLE FOR NOTIFYING TO THE OPERATING
ANY DEVIATION FROM THIS PLAN

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 01-21-2001 BY 60322 UCBAW

THE EFFECT OF PLANTING AND MULCHING AFTER CONSTRUCTION OF TREATMENT

10. UPPER ARM: 6-INCHES IN DIAMETER AND THICK

1. THESE ARE THE FACTS FOR SEQUENT COMMENT.

Road Is Existing, New Construction Begins Where Needed

HUPP Surveying & Mapping

Drafted BY:

Date Drafted

Job Number:

GRANTSVILLE, WV 26147

Author: A. Li happ@frontier.net.net

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08/14/11

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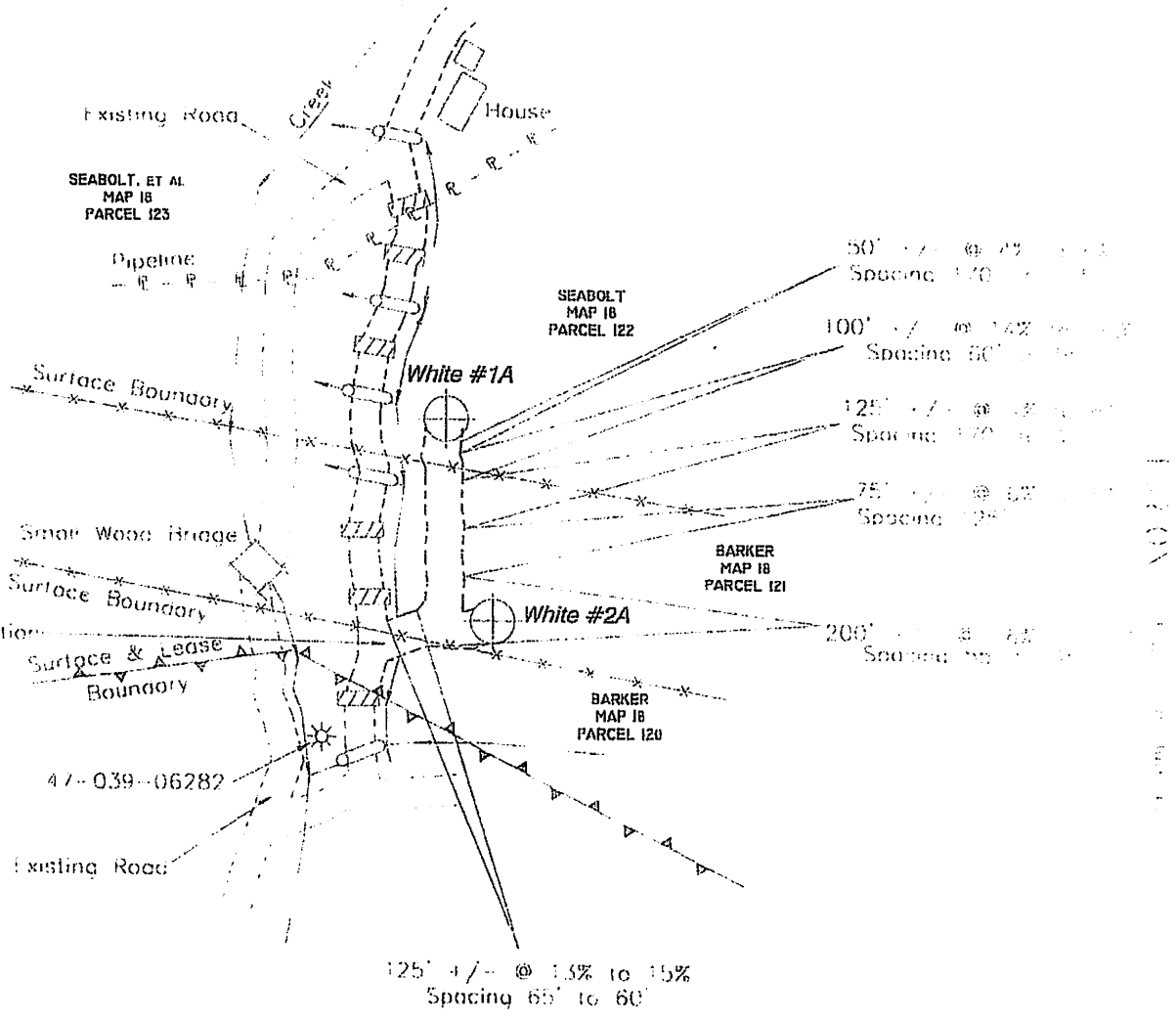
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WV Dept. of Environmental Protection

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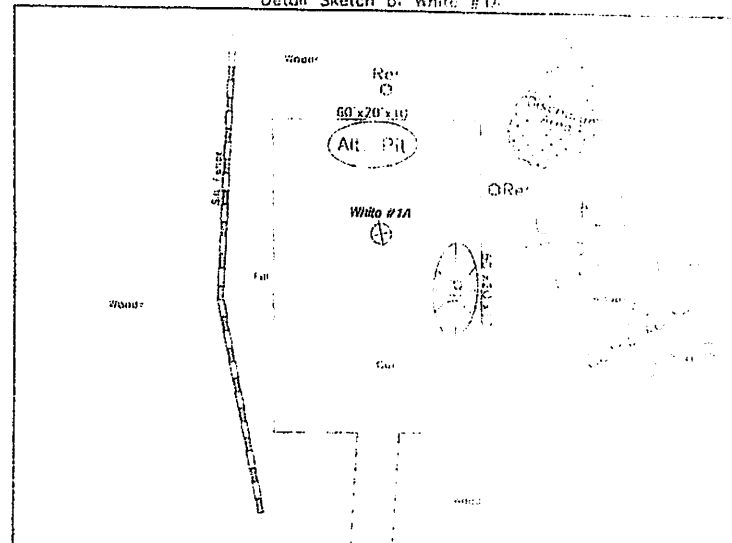
Form W-9

RAVEN RIDGE ENERGY, LLC. WHITE #1A

Page 6 of 6



Detail Sketch of White #1A



in Fall Minimum 12' Culvert

EXISTING UTILITIES ARE SHOWN UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS RHP MANUAL. CONTRACTORS SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

PROTECT EXISTING TRAPS AND APPROPRIATE CROSSLAND CONTROL BARRIERS ARE TO BE MAINTAINED. ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED BY DEP OIL AND GAS RHP MANUAL. FIELD CONDITIONS CHECK OUTCROPPS AND SEPARATE PERMITS MAY BE REQUIRED BY THE DOT. WHEN THESE CONDITIONS ARE MAINTAINED, CROSSLAND CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE OPERATOR OF ANY DEVIATION FROM THIS PLAN.

CONTRACTORS ARE RESPONSIBLE FOR LOCATING UTILITIES WHETHER BY FIELD SURVEY OR BY RECORD DRAWINGS.

CONTRACTORS SHALL MAINTAIN ALL SURFACES AFTER CONSTRUCTION OF LOCATIONS.

CONTRACTORS SHALL MAINTAIN ALL SURFACES TO ORIGINAL GRADE AND THICKNESS.

CONTRACTORS SHALL MAINTAIN ALL SURFACES TO ORIGINAL GRADE AND THICKNESS.

HUPP Surveying & Mapping	Drafted BY:	Date Drafted:	Job Number:
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Simple Wood Bridge

Install Minimum 12" Culvert

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS BMP MANUAL. ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV DOT REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

SEDIMENT BASINS, TRAPS AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV DEP OIL AND GAS BMP MANUAL. FIELD CONDITIONS, CREEK CUTTHROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR LOCATING UTILITIES AND OTHER DRAINAGE ON THIS PLAN OR NOT.

TEMPORARY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT AND STACK ALL TIMBER ABOVE 6" DIAMETER IN DIAMETER AND THICKER.

STAKE, BRUSH, SIGN, LOCATION FOR SEDIMENT CONTROL.

Surface & Levee Boundary

47-039-06282

BARKER
MAP 16
PARCEL 133

100' +/- @ 8% to 10%
Spacing 100' to 80'

75' +/- @ 2% to 4%
Spacing 250' to 170'

47-039-06283

55
55
White Hollow Road
Gate
Surface Boundary

CUNNINGHAM ENERGY, LLC
MAP 18
PARCEL 148

HARPER
MAP 18
PARCEL 136

HOFFMAN
MAP 18
PARCEL 147

100' +/- @ 16% to 20%
Spacing 55' to 60'

100' +/- @ 11% to 15%
Spacing 75' to 65'

200' +/- @ 1% to 3%
Spacing 400' to 210'

100' +/- @ 9% to 11%
Spacing 90' to 75'

125' +/- @ 1% to 3%
Spacing 400' to 210'

200' +/- @ 25% to 22%
Spacing 45' to 40'

275' +/- @ 2% to 4%
Spacing 250' to 170'

225' +/- @ 14% to 16%
Spacing 60' to 55'

175' +/- @ 5% to 7%
Spacing 135' to 115'

200' +/- @ 16% to 18%
Spacing 55' to 50'

700' +/- @ 3% to 5%
Spacing 215' to 135'

250' +/- @ 9% to 11%
Spacing 90' to 75'

350' +/- @ 13% to 15%
Spacing 65' to 60'

350' +/- @ 18% to 20%
Spacing 50' to 45'

Road On Page 1 is An Existing Access Road
Road On Page 2 is Existing And New Construction Where Noted
Upgrade Drainage Features Where Needed

RAVEN RIDGE ENERGY, LLC.

HUPP Surveying & Mapping

Project #

Date: 10/1/2013

Lot Number

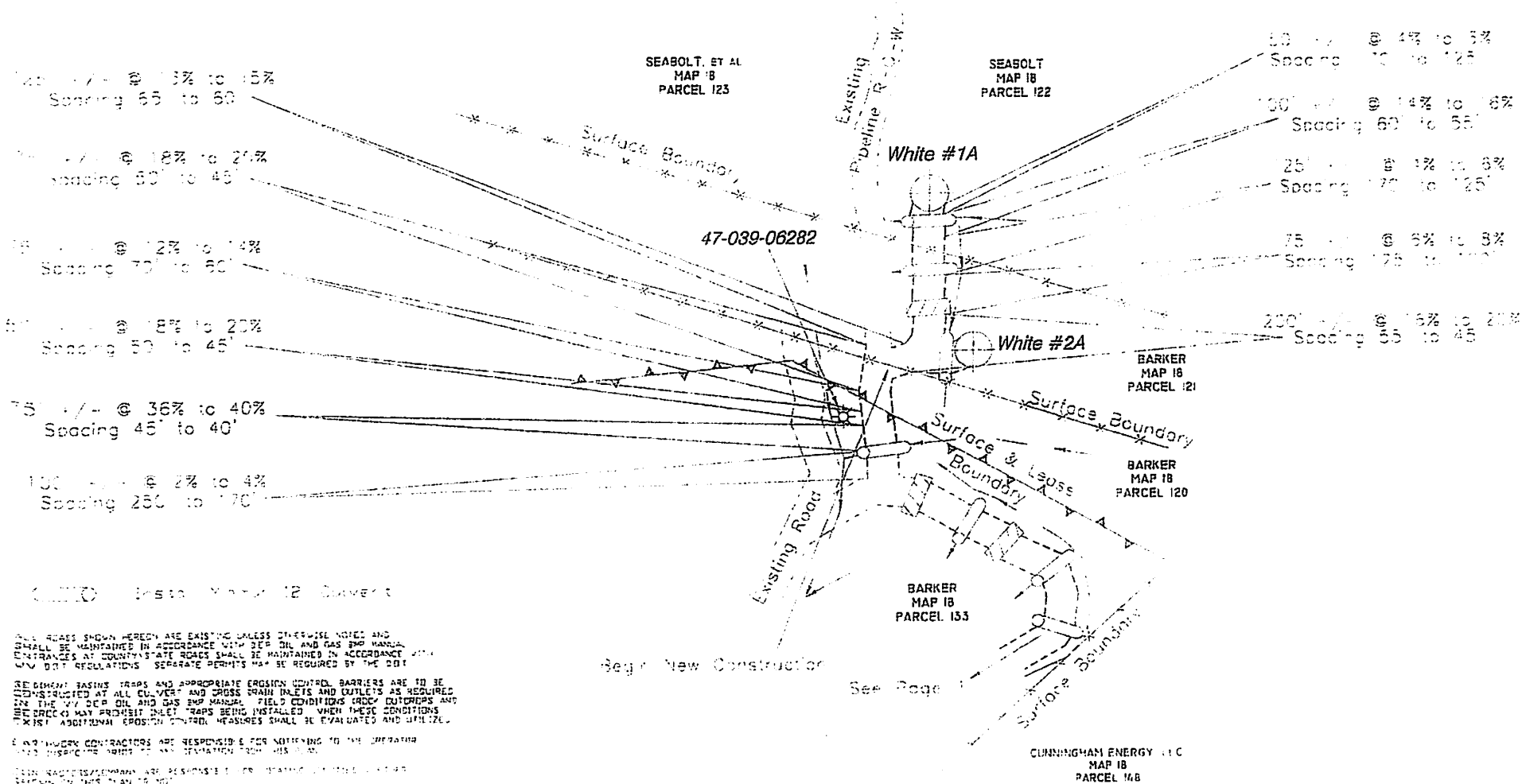
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WV Dept of Environmental Protection
2013

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RAVEN RIDGE ENERGY, LLC. WHITE #1A

Drawing Not To Scale NORTH



ALL DEEDS SHOWN HEREBY ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH THE OIL AND GAS EBP MANUAL. DISTANCES AT COUNTY-STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH CIVIL DOT REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

THE SURVEYING ENGINEER AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE OIL AND GAS EBP MANUAL. FIELD CONDITIONS (ROCK OUTCROPPINGS AND INTERLOCK) MAY PREVENT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/OPERATORS ARE RESPONSIBLE FOR STATING THE DATE OF THE SURVEY TO THE STATE OF TEXAS.

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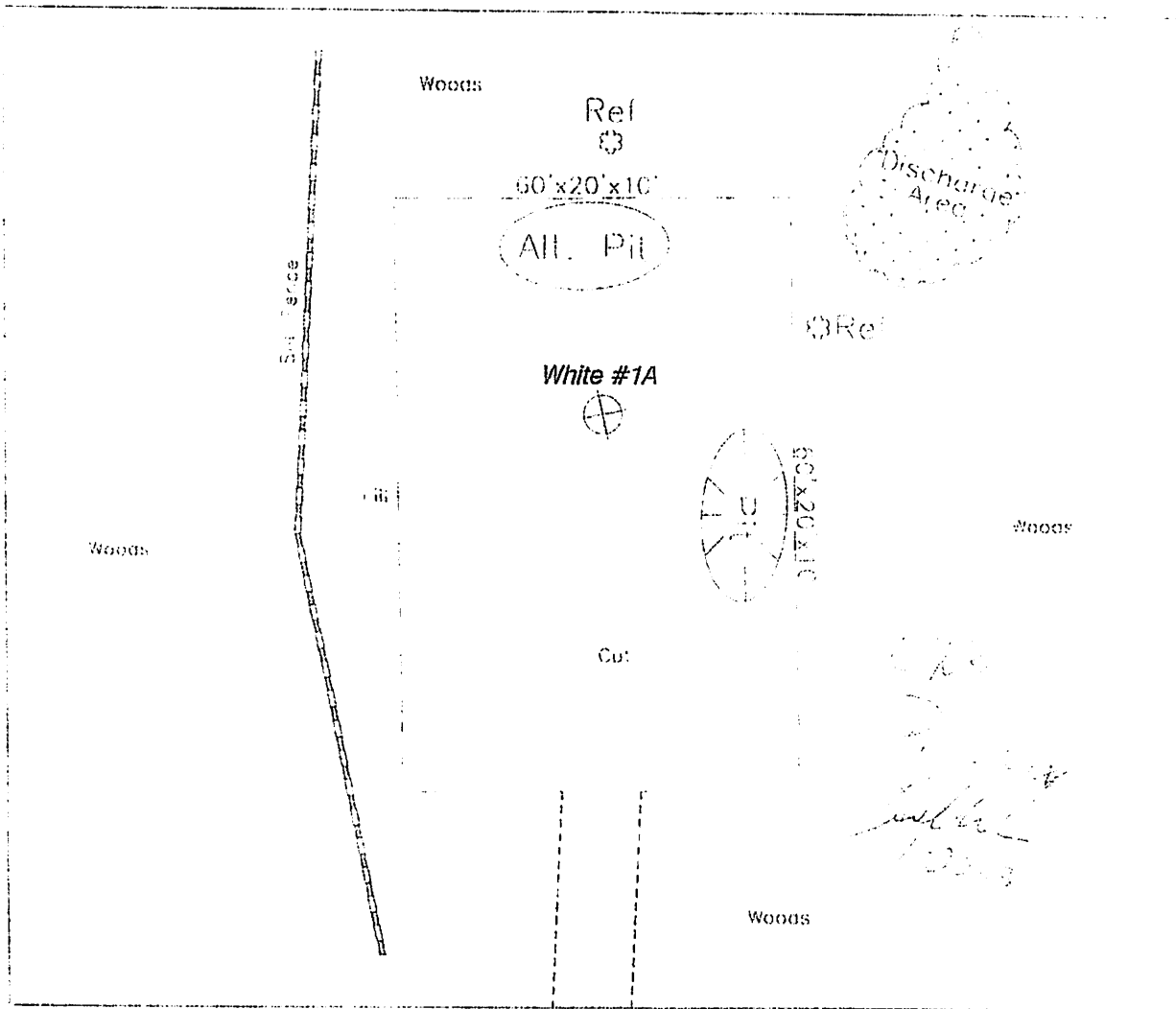
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Office of Oil and Gas
OCT 15 2013

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RAVEN RIDGE ENERGY, LLC.
WHITE #1A



10 Install Minimum 12" Culvert

ALL ROADS SHOWN HEREIN ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS BMP MANUAL. ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH DMV DOT REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DMV.

STUDENT BASINS, TRAPS AND APPROPRIATE CRUSTION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL INLET AND CROSS BRAIN INLETS AND OUTLETS AS REQUIRED IN THE VV DCP DR AND GAS BPP MANUAL. FIELD CONDITIONS (CRACK DILATIONS AND SEVERITY) MAY PREVENT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL CRUSTION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

ARTHWORX CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE DM OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR LOCATING UTILITIES AND DETER-
MINING THE LOCATION OF THIS PLANT OR ROAD

TEMPERATURE SEEN AND MOUCHED OFF SLOPES AFTER DEMONSTRATION OF LOCATION.

END AND STAGE ALL TUBES ABOVE 6 INCHES IN DIAMETER ARE TUBES

STAIR BRUSH BELLO LOCATION FOR SEWERS CAPTURE

HUPP Surveying & Mapping

TX 647 GRANISVILLE, WV 26147

NAME: MAE mpo@iconet.net

Drafted BY:

Date Drafted:

Job Number:

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088/14/12

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WV Dept. of Environmental Protection

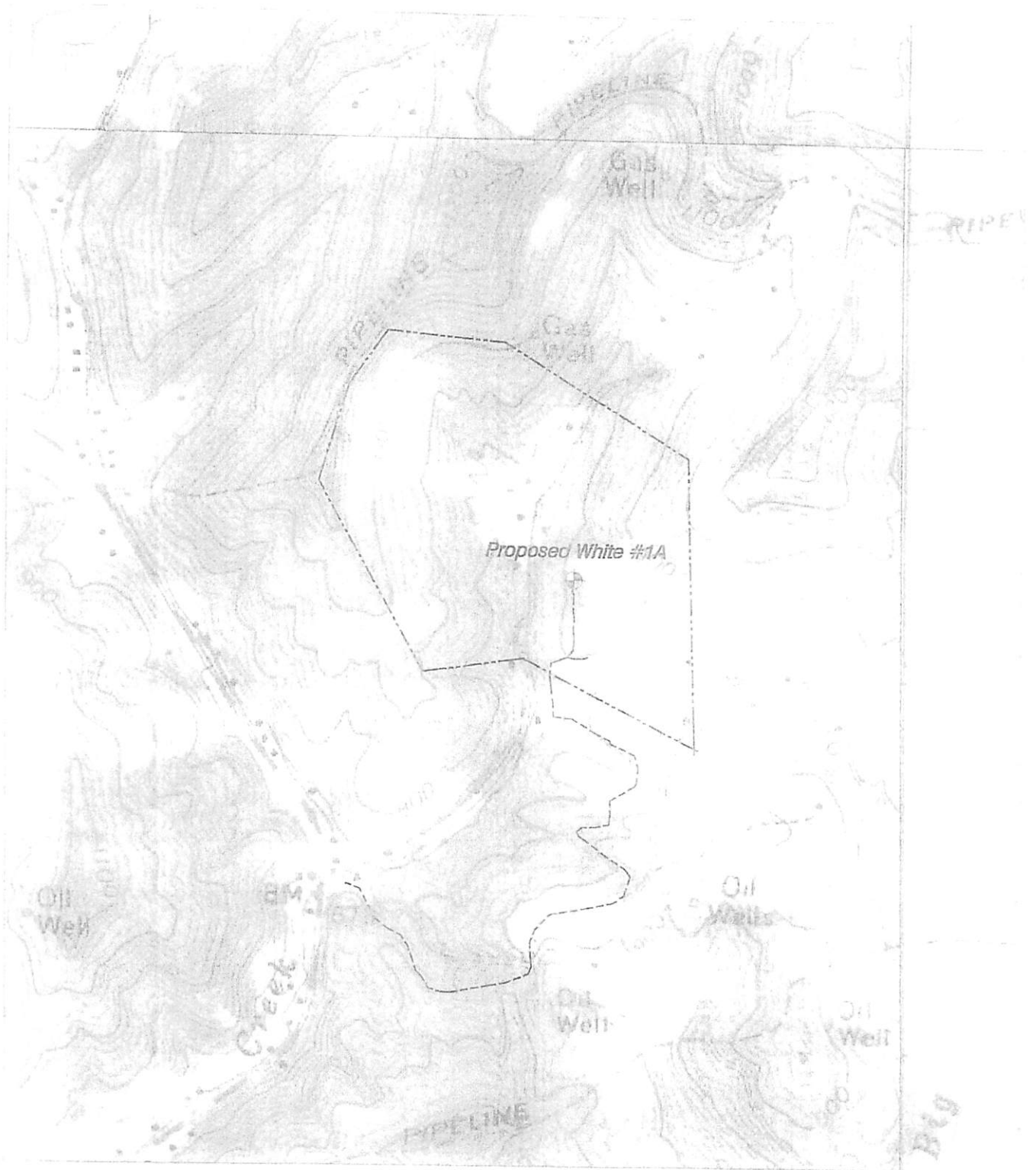
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Form W-9

Raven Ridge Energy, LLC.

White #1A

Page 1 of 1



HUPP Surveying & Mapping

P.O. BOX 642 GRANTSVILLE, WV 26142
 TEL: 304.335.7035 - MAIL: hupp@frontiernet.net

1" = 1000
 Blue Creek Quad

Raven Ridge Energy, LLC
 3230 Pennsylvania Ave
 Charleston, WV 25305

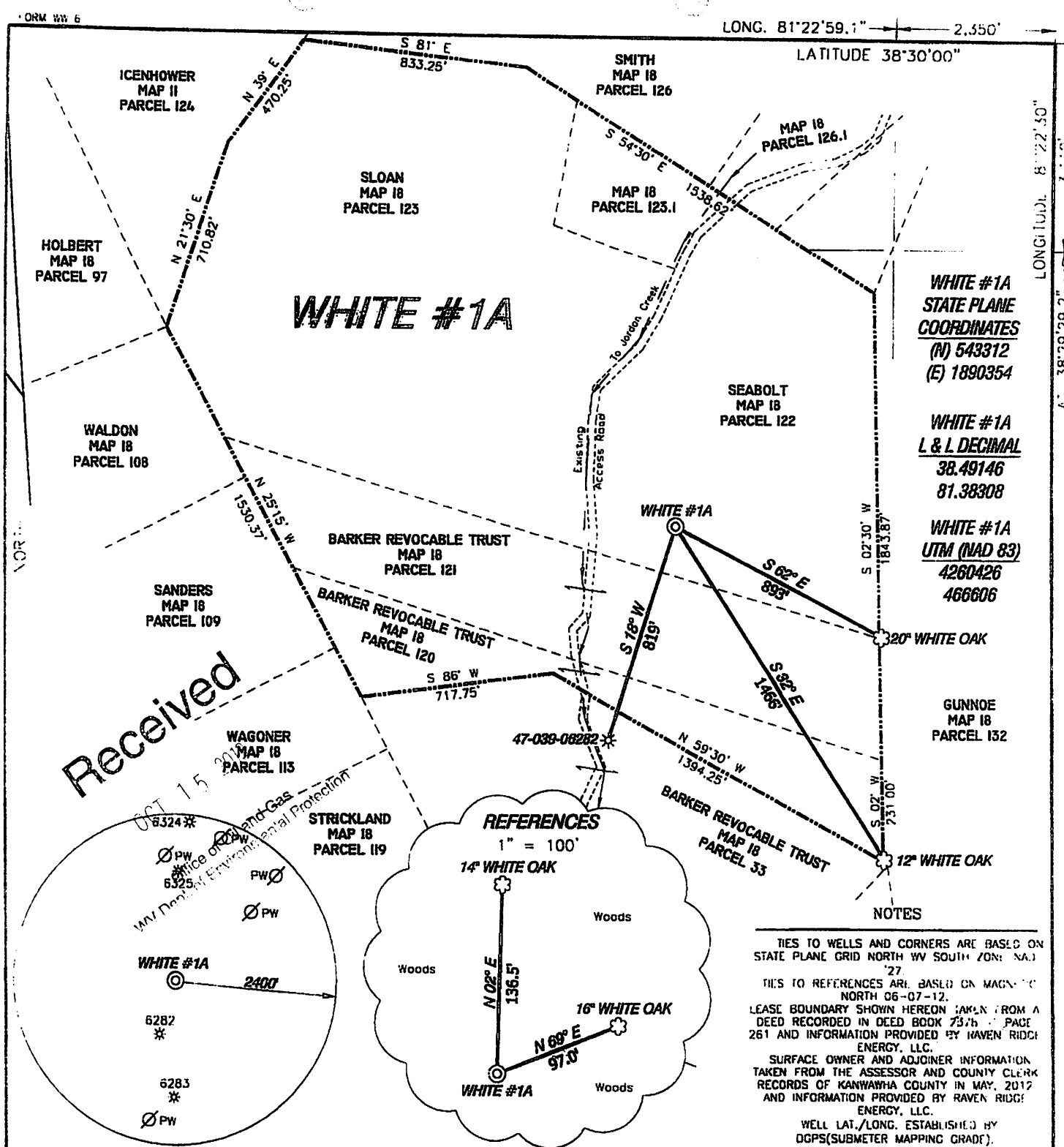
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THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 834

DOYLE HUPP JR.
LICENSED
No. 834
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE AUGUST 14 2012

OPERATORS WELL NO. WHITE #1A

API WELL NO. 47-039-06354R

STATE WV COUNTY KANAWHA PERMIT 06354R

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. W2146 (BK 37-48)

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE) SCALE 1" = 500'

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL TYPE: OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL ☐ IF "GAS" PRODUCTION ☒ STORAGE ☐ DEEP ☐ SHALLOW ☒

LOCATION: ELEVATION 839' WATERSHED TRIBUTARY OF JORDAN CREEK

DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE BLUE CREEK 7.5'

SURFACE OWNER TEX SEABOLT ACREAGE 251

ROYALTY OWNER IRENE RUNYON, et al LEASE ACREAGE 112.01

PROPOSED WORK: LEASE NO.

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATION ☒ PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG ☐ OTHER ☐

PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION BEREA

ESTIMATED DEPTH 3,000'

WELL OPERATOR RAVEN RIDGE ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM

ADDRESS 3230 PENNSYLVANIA AVE, CHARLSTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE, CHARLSTON, WV 25302